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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,935	12/29/2004	Fumihiko Arakawa	123746	5086
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EXAMINER				
NGO, HUNG V				
ART UNIT		PAPER NUMBER		
2831				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/519,935

Applicant(s)

ARAKAWA ET AL.

Examiner

Hung V. Ngo

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/IB)
Paper No(s) Mail Date 6/15/07 & 5/3/06 & 12/29/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s) Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 1, 3 are objected to because of the following informalities: "a width in the range of $C(1 \pm 30\%)$, where C is a predetermined value" is unclear because of the width does not include a unit such as mm or microns. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 4-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al (US 2004/0074655).

Re claim 1, Takahashi et al disclose an electromagnetic shielding sheet comprising: a transparent base (2), and a meshed conductive structure (4, 5) laminated to one of the surfaces of the transparent base; wherein the conductive structure has

lines having straight parts of a width in the range of $C(l \pm 30\%)$ [0144], where C is a predetermined value.

Re claim 4, wherein the widths of the straight parts of the lines an inner part of the meshed conductive structure surrounded by a peripheral part of a width corresponding to 1 to 50 meshes or a peripheral part of a width in the range of 0.15 to 15 mm are in the range of $C(l \pm 30\%)$, where C is a predetermined value ($L1=2\text{mm}$) [0144].

Re claim 5, wherein the widths of the straight parts of the lines of the conductive structure are in the range of 5 to 25 microns, and the lines are arranged at pitches in the range of 150 to 500 microns [0152].

Re claim 6, wherein the conductive structure is a metal layer [0070].

Re claim 7, wherein at least one of the surfaces of the conductive structure is processed by a blackening treatment [0139].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al in view of Ryohei et al (JP 2000-286594).

The teaching of Takahashi et al as discussed above does not disclose the radius of curvature being 1.5-3 times the thickness of the conductive structure.

Ryohei et al teach the use of a radius of curvature for the conductive structure (2) for improving visibility. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structure of Takahashi et al by employing the radius of curvature for improving visibility and it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the modified takahashi et al by employing 1.5-3 times the thickness of the conductive structure, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al in view of Ridener (6,054,647).

The teaching of Takahashi et al as discussed above does not disclose antirust layer.

Ridener teaches the of antirust (non-corrosive) (col. 2, lines 1-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the antirust with the structure of takahashi et al for the purpose of preventing rust.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

The limitation "wherein at least recesses in the meshed conductive structure are filled up with a transparent resin such that the surface of the conductive structure is substantially flat" in combination with other limitations present is neither taught nor disclosed in the prior art of record.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung V Ngo whose telephone number is (571) 272-1979. The examiner can normally be reached on Monday to Thursday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Diego Gutierrez can be reached on (571) 272-2800 EXT 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung V Ngo/
Primary Examiner, Art Unit 2831
March 16, 2008

